



# Virginia Healthcare Workforce Briefs

Indicators from the Bureau of Economic Analysis

Regional Economic Accounts

**Series 3: Income & Compensation**

Series 3, Issue 21

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## Highlights

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- ◆ In addition to the new income and compensation estimates for Quarter 3 (Q3) 2016 from the Bureau of Economic Analysis (BEA), this report also includes revised estimates for the first two quarters of 2016.
- ◆ Total earnings in Virginia's Health Care & Social Assistance (HC&SA) sector grew by \$483 million to \$29.90 billion in Q3 2016. Over the past year, total HC&SA earnings in Virginia have increased by \$2.24 billion.
- ◆ Total employee compensation in Virginia's HC&SA sector grew by \$463 million to \$27.32 billion in Q3 2016. This represents a three-month annualized growth rate of 7.1%.
- ◆ Virginia's HC&SA compensation per employee grew by \$525 to \$63,031 in Q3 2016. However, this increase was slightly below the nationwide average as overall HC&SA compensation per employee across the country grew by \$737 during the quarter.

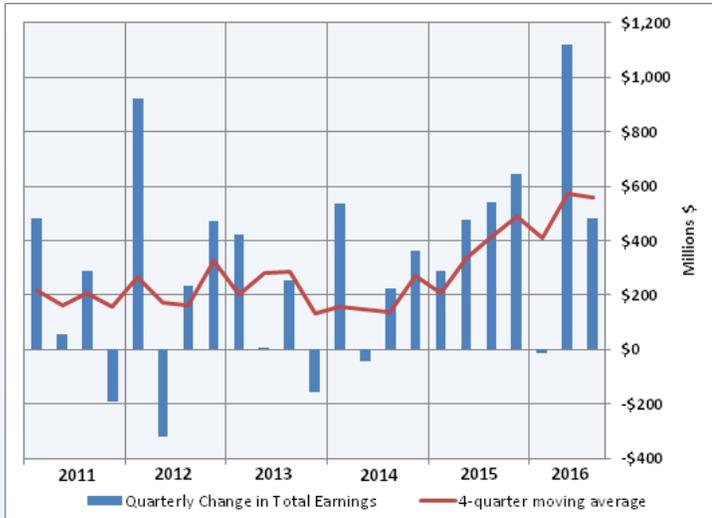
*The calendar year is the basis for data in this series. See Page 5 for additional information on this series.*

## Data in Brief

	Income (Millions of Dollars)				Growth Rate, Annualized		
	Q3 2015	Q1 2016	Q2 2016	Q3 2016	Annual	6-Month	Quarterly
<b>Earnings (Personal income less rents, interest, dividends and government payments)</b>							
<b>Virginia</b>	\$307,259	\$310,532	\$314,119	\$318,286	3.6%	5.1%	5.4%
<b>National</b>	\$1,136,825	\$1,298,044	\$1,455,927	\$1,602,604	4.2%	5.5%	5.2%
<b>Health Care &amp; Social Assistance Earnings</b>							
<b>Virginia</b>	\$27,665	\$28,296	\$29,417	\$29,900	8.1%	11.7%	6.7%
<b>National</b>	\$1,220,657	\$1,251,205	\$1,280,701	\$1,301,098	6.6%	8.1%	6.5%
<b>Health Care &amp; Social Assistance Employee Compensation (Earnings less proprietor's income, includes salaries, wages &amp; benefits)</b>							
<b>Virginia</b>	\$25,233	\$25,781	\$26,859	\$27,322	8.3%	12.3%	7.1%
<b>National</b>	\$1,093,437	\$1,119,650	\$1,146,866	\$1,116,261	6.7%	8.5%	6.9%
<b>Health Care &amp; Social Assistance Compensation per Employee (HWDC Estimate)</b>							
<b>Virginia</b>	\$59,775	\$60,316	\$62,506	\$63,031	5.4%	9.2%	3.4%
<b>National</b>	\$58,665	\$59,127	\$60,036	\$60,773	3.6%	5.6%	5.0%

## Health Care & Social Assistance Earnings

**Figure 1: Quarterly Change in Total Earnings from Virginia’s Health Care & Social Assistance Sector. Includes proprietor’s income, salaries and wages, and benefits.**



According to data released on Tuesday, December 20, 2016 by the U.S. Bureau of Economic Analysis, total earnings in Virginia’s Health Care & Social Assistance (HC&SA) sector increased by \$483 million in Q3 2016 to \$29.90 billion, which represents a three-month annualized growth rate of 6.7%.

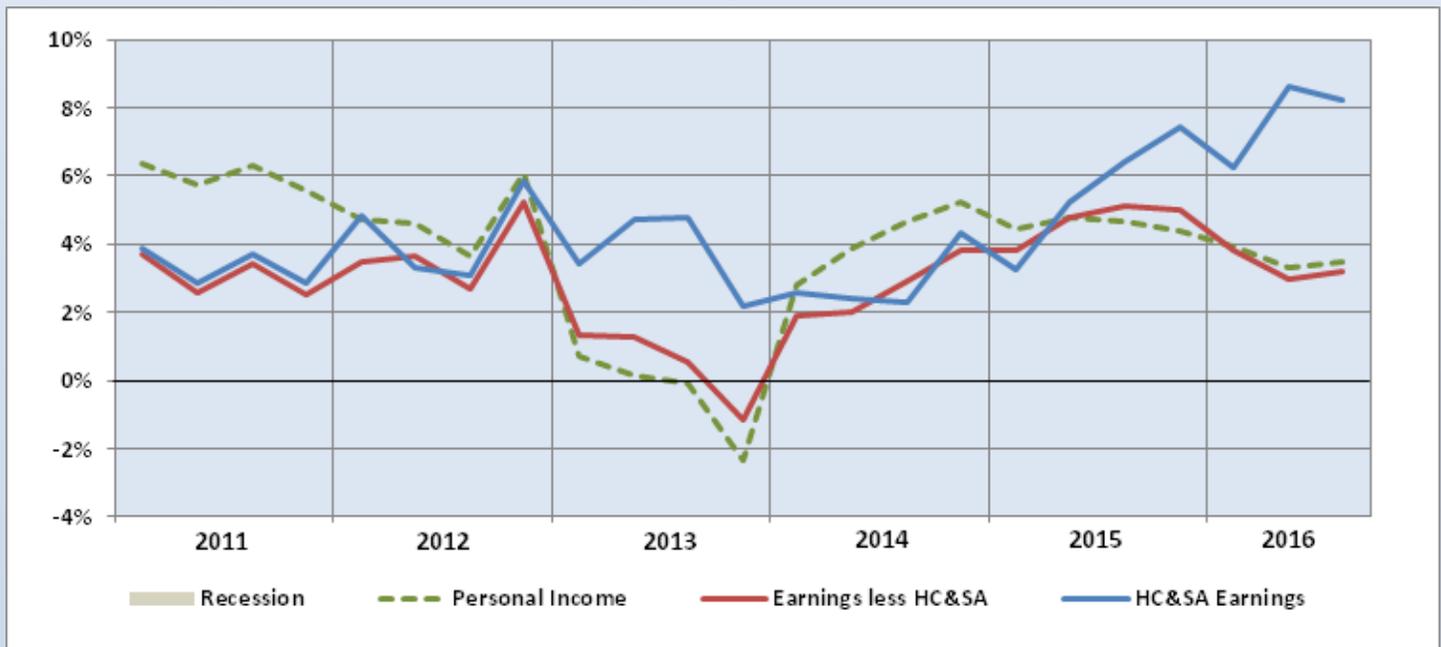
Virginia’s total HC&SA earnings during the quarter were slightly above the national average. In Q3 2016, national HC&SA earnings increased by \$20.40 billion, which represents a three-month annualized growth rate of 6.5%.

Total HC&SA earnings in the state have been growing at an impressive rate over the past year. During the past four quarters, Virginia’s HC&SA earnings have grown by \$2.26 billion, which represents an 8.1% growth rate. Over the same time period, overall HC&SA earnings across the country have grown by only 6.6%.

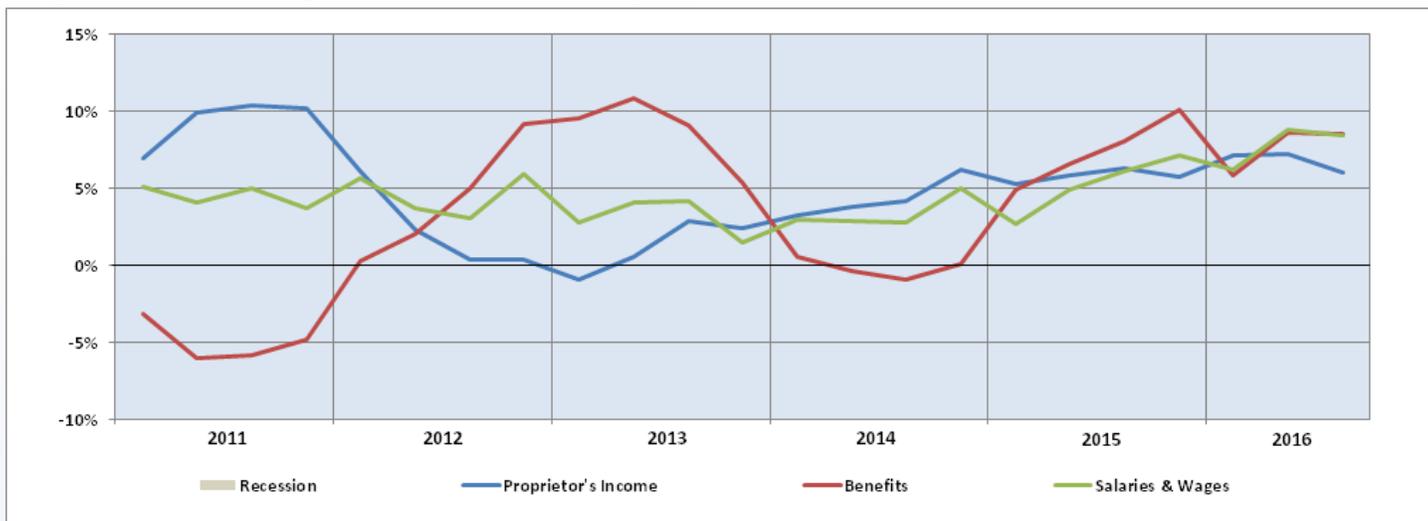
### Virginia HC&SA Earnings Growth Rate

Given the strong earnings growth in Virginia’s HC&SA sector, its four-quarter earnings growth rate moving average has been trending upward for two years now. After reaching a low of 2.28% in Q3 2014, this moving average has more than tripled to 8.25%. Meanwhile, the comparable moving averages for non-HC&SA earnings and personal income have been trending slightly downward throughout 2016. In Q3 2016, the four-quarter moving average for the growth rate in non-HC&SA earnings experienced a slight uptick from 2.97% to 3.18%. At the same time, the four-quarter moving average for the growth rate in the state’s personal income also rose slightly from 3.33% to 3.48%. However, despite these quarterly gains, both of these moving average are below the levels from one year ago. In Q3 2015, the four-quarter moving average of the growth rate in non-HC&SA earnings was 5.14%, while the comparable average for personal income was 4.69%.

**Figure 2: Earnings Growth Rate, 4-Quarter Moving Average (Annualized)**



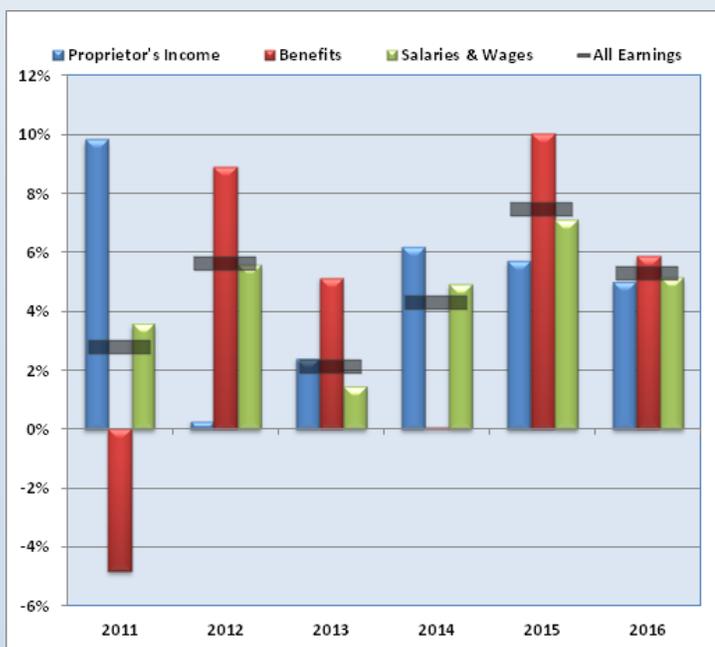
### Virginia HC&SA Earnings Growth Rate by Earnings Type



**Figure 3: Earnings Growth Rate by Type of Earnings, 4-Quarter Moving Average (Annualized)**

HC&SA earnings growth for both proprietors and employees has been very strong throughout 2016, but these growth rates have been trending in different directions. At the beginning of 2016, HC&SA proprietor's income was the fastest growing earnings type in the state with a four-quarter moving average of 7.16%. However, this growth rate has drifted downward throughout the year to 6.02% in Q3 2016. Meanwhile, the four-quarter growth rate moving average for both types of employee compensation have increased since the beginning of the year. For instance, the four-quarter moving average for the earnings growth rate of HC&SA salaries & wages has increased from 6.25% to 8.48%, while the comparable moving average for HC&SA employee benefits has experienced even greater growth from 5.84% to 8.55%.

### Annual Growth by Earnings Type



**Figure 4: Virginia HC&SA Earnings Growth Rate by Type of Earnings (Annualized)**

So far in 2016, total HC&SA earnings in Virginia have grown at a 5.2% annualized rate. If this present trend continues through the rest of the year, this would represent a slow-down relative to the growth experienced in 2015 when Virginia's HC&SA earnings grew by 7.4%. In fact, the current annualized growth rate for all three types of HC&SA earnings in the state are below their levels from the previous year. HC&SA proprietor's income in the state is currently growing at a 5.0% annualized rate, but this is down from its 5.7% growth rate in 2015. In fact, at its current level, this would represent the lowest annual growth rate for HC&SA proprietor's income since 2013. As for HC&SA employee earnings, its growth rate has fallen from 10.0% in 2015 to a 5.9% annualized rate through the first three quarters of 2016. Finally, HC&SA employee salaries & wages have experienced a decline in its growth rate from 7.1% in 2015 to a 5.1% annualized rate this year.

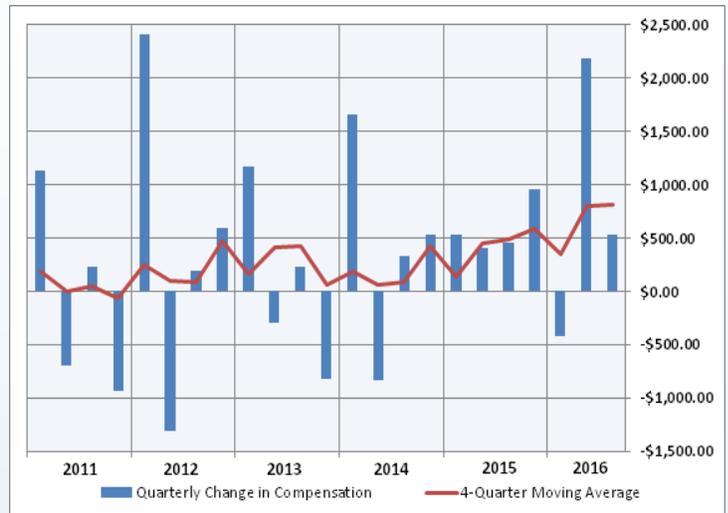
Earnings Type	Level (Millions)	Share
Proprietor's Income	\$2,578	8.6%
Benefits	\$4,644	15.5%
Salaries & Wages	\$22,678	75.8%
<b>Total</b>	<b>\$29,900</b>	<b>100%</b>

### HC&SA Compensation per Employee

According to Healthcare Workforce Data Center estimates (see methodology, next page), employees in Virginia’s HC&SA sector earned an average of \$63,031 (annualized) in Q3 2016. Note this figure includes salaries & wages plus the cost of benefits for employed persons only. Practitioners in private practice, which includes a large number of the sector’s highly paid professionals, are not included in this figure.

In Q2 2016, Virginia experienced its largest quarterly gain in its total HC&SA compensation per employee in more than four years. This was followed up with a more modest gain in Q3 2016 as the state’s total HC&SA compensation per employee grew by \$525 during the most the recent quarter. This represents a three-month annualized growth rate of 3.4%, which was below the 5.0% nationwide average in Q3 2016. However, long-term growth in the state’s HC&SA compensation per employee has been more impressive with a current 12-month growth rate of 5.4%.

**Figure 5: Quarterly Change in Employee Compensation from Virginia’s Health Care & Social Assistance Sector.**

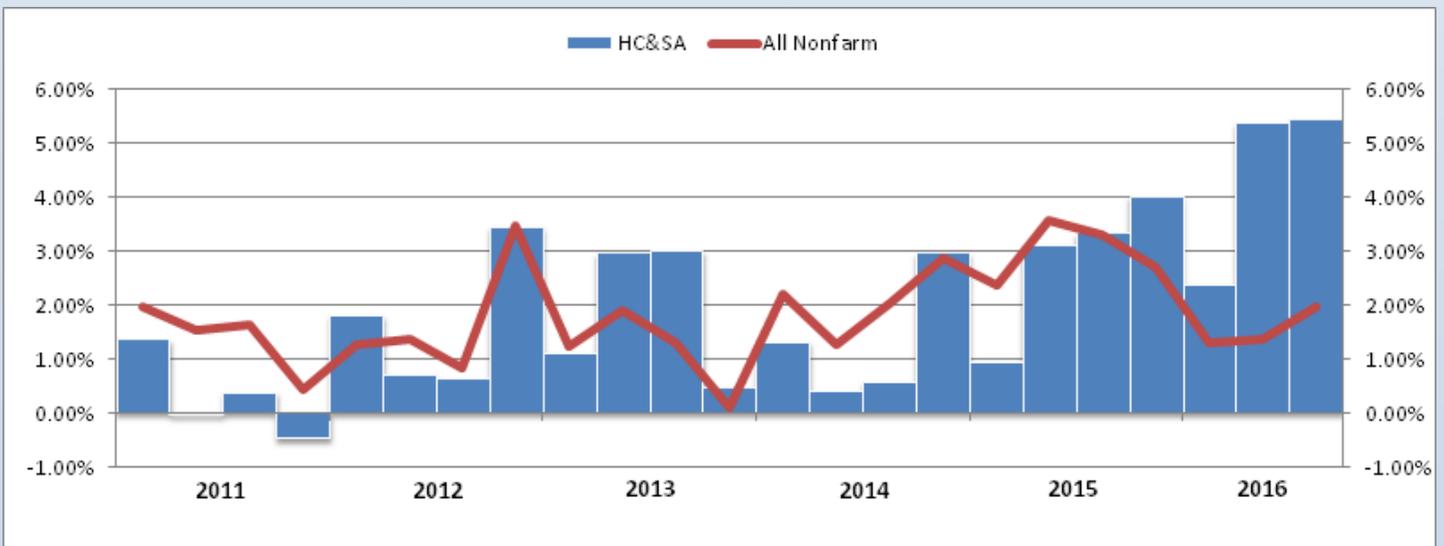


	Q3 2013	Q3 2014	Q3 2015	Q3 2016
Compensation per Employee	\$57,520	\$57,848	\$59,775	\$63,031

### Compensation per Employee Growth Rate

After the year-over-year growth rate in Virginia’s HC&SA compensation per employee more than doubled from 2.38% to 5.38% in Q2 2016, this growth rate experienced another slight uptick in Q3 2016 to 5.45%. This represents the highest value for the state’s year-over-year growth rate in HC&SA compensation per employee since Q4 2005. In fact, growth in HC&SA compensation per employee in the state has been surging for the past two years. In Q3 2014, year-over-year growth in Virginia’s HC&SA compensation per employee was barely positive at 0.57%. As for total nonfarm compensation per employee, its year-over-year growth rate also increased in Q3 2016 from 1.36% to 1.98%. This current year-over-year growth rate represents the highest level for Virginia’s total nonfarm compensation per employee so far in 2016.

**Figure 6: Year-Over-Year Change in Compensation Per Employee.**



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## Definitions

Economic data in this briefing is from the US Bureau of Economic Analysis' Regional Economic Accounts. In particular, we use the Quarterly State Personal Income Accounts. The definitions provided here are written for a lay audience. More technical definitions and in-depth information on the Regional Economic Accounts are available on the BEA's website: <http://www.bea.gov/regional/about.cfm>.

**Personal Income:** Income received from all sources, including salaries & wages, benefits, business profits, rents, government payments or retirement and investment funds. Personal income is based on where recipients live.

**Earnings:** Earned income includes salaries & wages, benefits (aka supplements to wages and salaries) and proprietor's income. Earnings and its components are based on where recipients work.

**Proprietor's Income:** Income from small businesses (sole proprietorships & partnerships), corporate director's fees and tax-exempt cooperatives. It does NOT include dividends or interest received by non-financial businesses or rental income received by non-real estate businesses.

**Compensation:** Salaries & wages and benefits.

**Benefits:** Referred to as "supplements to wages and salaries by the BEA, benefits includes employer contributions to retirement funds, insurance (including health and life) and to government social insurance programs (e.g., unemployment insurance, Social Security, worker's compensation insurance, etc).

**Salaries & Wages:** Salaries, wages, commissions, bonuses and tips, before deductions, based on when payments are disbursed. The value of stock options are also included at the time the options are exercised.

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## Method of Estimating Compensation per Employee

The HWDC derives estimates of compensation per employee from two sources: 1) US Bureau of Economic Analysis' Regional Economic Accounts (REA), and, 2) the Current Establishment Survey (CES) administered jointly by the US Bureau of Labor Statistics and the US Census Bureau. These sources use different methodologies and different definitions. Although more vigorous estimates of employment are available, the HWDC uses these sources to provide the most timely indication of current trends possible at the state-industry level. The HWDC estimates are early indicators only.

To make the two data sources more comparable, the HWDC makes the following transformations:

**CES:** To obtain quarterly estimates of employment, monthly figures are averaged for the quarter. For nonfarm employment, we remove the latest available estimate of logging employment from the Quarterly Census of Employment and Wages, rounded to the nearest hundred, from nonfarm totals in the CES prior to averaging.

**REA:** From nonfarm compensation (or its components), we remove military earnings, agriculture, fishing and forestry earnings and an estimate of earnings from households. For household earnings estimates, we use the REA's Annual State Personal Income and Employment tables to develop current estimates of the proportion of "Other services, except public administration" compensation from employment in private households. We use the most recent data available for the current quarter. We apply this proportion to the current quarterly estimate of "Other services, except public administration".

Despite these transformations, the figures are not wholly comparable. The BEA makes additional adjustments to BLS data when creating its own, annual estimates of employment. Historical indicators are not adjusted by the HWDC, however adjustments made to REA or CES series are incorporated into historical data. For more information on employment data and the REA, see the BEA's *State Personal Income and Employment Methodology*, pages XI-1 to XI-11 & Table K.

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The Department of Health Professions Healthcare Workforce Data Center works to improve the data collection and measurement of Virginia's healthcare workforce through regular assessment of workforce supply and demand issues among the 80 professions and 350,000 practitioners licensed in Virginia by DHP.

The HWDC collects data on Virginia's licensed health professionals through surveys completed during the online license renewal and application process. Survey results and data may be accessed on our website: [www.dhp.virginia.gov/hwdc/](http://www.dhp.virginia.gov/hwdc/).

The HWDC also provides a series of Virginia Healthcare Workforce Briefs based on data collected by the US Department of Labor's Bureau of Labor Statistics and the US Department of Commerce' Bureau of Economic Analysis.

Virginia Healthcare Workforce Briefs:

Series 1: State & National Employment (Monthly)

Series 2: Virginia Regional Employment (Monthly)

Series 3: Income & Compensation (Quarterly)

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## About the Data

Data used in creating this report is from the US Department of Commerce' Bureau of Economic Analysis' Regional Economic Accounts. Unless otherwise noted, data is seasonally adjusted and annualized, and quarterly presentations are based on the calendar year. Data from recent quarters is preliminary and subject to revision in future releases from the BEA. Revisions will be reported in future editions of this series.

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